UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,416	01/16/2004	Eiji Shirai	247794US0	5648

22850 7590 09/13/2006

C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
YOON, TAE H	
ART UNIT	**PAPER NUMBER**
1714	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/758,416	SHIRAI, EIJI	
	Examiner	Art Unit	
	Tae H. Yoon	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The recited "kinds of" in claim 3 is objected, and cancellation is suggested.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,998,212. Although the conflicting claims are not identical, they are not patentably distinct from each other because the crystalline polyester of said patent inherently possesses the instantly recited properties since the polyester of 1,6-hexanediol and fumaric acid is taught at col. 2, lines 39-41 and col. 3, lines 3-15 of said patent. The use of an additional adipic acid is also taught in table 1 of said patent. The toner having an additional resin binder in claim 12 of said patent encompasses the instant claim 5 (resin binder).

Claims 9-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,890,895. Although the conflicting claims are not identical, they are not patentably distinct from each other because the crystalline polyester of said patent inherently possesses the instantly recited properties since the polyester of 1,6-hexanediol and fumaric acid having the instant ratio of a softening point and a maximum peak temperature of heat of fusion and a softening point is taught at col. 2, lines 45-65, col. 3, lines 29-46 and col. 4, lines 16-31 of said patent.

Claims 9-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim1 of copending Application No. 11/010,261 (US 2005/0147911 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the polyester of said copending Application encompasses the instant polyester as evidenced by table 3 wherein crystalline polyester of 1,6-hexanediol and fumaric acid with a softening point of 116.3°C and the instant ratio of a maximum peak temperature of heat of fusion and a softening point is taught. The use of waxes is taught page 14 of specification.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shirai et al (US 6,998,212).

Shirai et al teach the crystalline polyester of in table 1 and its use in a toner in examples and claims. The crystalline polyester of Shirai et al inherently possesses the instantly recited properties since the polyester of 1,6-hexanediol and fumaric acid is taught at col. 2, lines 39-41 and col. 3, lines 3-15 of said patent. The use of an additional adipic acid is also taught in table 1 of said patent. Additional resin for the toner and natural ester waxes are taught at col. 5, lines 37-43 and col. 6, line 5, respectively.

Thus, the invention lacks novelty.

Claims 1 and 3-13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shirai et al (US 6,890,695).

The crystalline polyester of Shirai et al inherently possesses the instantly recited properties since the polyester of 1,6-hexanediol and fumaric acid having the instant ratio of a softening point and a maximum peak temperature of heat of fusion and a softening point is taught at col. 2, lines 45-65, col. 3, lines 29-46 and col. 4, lines 16-31 of said patent.

Thus, the invention lacks novelty.

Claims 1 and 3-13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Aoki et al (US 6,383,705).

Aoki et al teach a composition comprising crystalline polyester and an amorphous polyester and/or amorphous polyester-polyamide and its use in a toner composition in abstract. The instant ratio of a softening point and a maximum peak temperature of heat of fusion, a number average molecular weight of a tetrahydrofuran-soluble component and a softening point are taught at col. 3, lines 42-60. Also, natural waxes such as rice wax having the instant melting point and pulverized toner particles are taught at col. 5, lines 28-47 and 66 to col. 6, line 10. Resins B and I in table 1 show the use of the instant amounts of 1,6-hexanediol and fumaric acid having the instant ratio of a softening point and a maximum peak temperature of heat of fusion and a softening point. The number average molecular weight of a tetrahydrofuran-soluble component is taught as below 1500 in said resins B and I in table 1, but Aoki et al teach that said number average molecular weight is 500-6000 (col. 3, lines 57-58) and 4120 (Resin K). Thus, resins of 1,6-hexanediol and fumaric acid having the instant number

average molecular weight would be anticipation since Aoki et al teach such range. See ***In re Mills***, 477 F2d 649, 176 USPQ 196 (CCPA 1972); Reference must be considered for all that it discloses and must not be limited to its preferred embodiments or working examples.

Thus, the invention lacks novelty.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as obvious over Aoki et al (US 6,383,705).

The instant invention further recites adipic acid over table 1 of Aoki et al wherein the use of an additional carboxylic acid is taught. Said adipic acid is taught at col. 1, line 67.

Thus, it would have been obvious to one skilled in the art at the time of invention to utilize said adipic acid with fumaric acid in Aoki et al since Aoki et al teach employing two different carboxylic acids absent showing otherwise.

Claims 1 and 3-5 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wintermantel et al (US 2004/0068049 A1).

Wintermantel et al teach a crystalline polyester of 1,6-hexanediol and fumaric acid in [0038], [0039] and [0076] and said polyester inherently possesses the instant properties.

Thus, the invention lacks novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tae H Yoon
Primary Examiner
Art Unit 1714

THY/September 9, 2006